SOCIAL SECURITY ACT: IN RELATION TO MATERNAL AND CHILD HEALTH*

By ELLEN STADTMULLER, M.D.
San Francisco

DISCUSSION *by Oscar Reiss, M.D., Los Angeles; Clifford Sweet, M.D., Oakland*

IN any discussion of maternal and child-health work under the Social Security Act, three sets of conditions need to be taken into consideration:

First, the provisions of the Act by which plans must be governed;

Second, health conditions and vital statistics indicating the special needs in maternal and child-health fields; and

Third, the fundamental activities of a maternal and child-hygiene program.

The question before us today, then, resolves itself into how the provisions expressed in the Act can be used to meet the needs of rural California by means of these fundamental activities.

PROVISIONS OF THE SOCIAL SECURITY ACT

I. The Social Security Act, which became a law in August, 1935, not only establishes a system of federal old-age benefits, encourages the development of State unemployment compensation systems, and makes available to the states federal aid for administration of unemployment compensation laws and for old-age assistance, aid of the blind, vocational rehabilitation and the expansion of public health work, but also contains provisions designed to promote more directly the security of children. These provide for grants to the state, for aid to needy dependent children in their own homes, services to crippled children and services to children who are homeless, dependent, neglected or in danger of becoming delinquent. In addition, there are grants for maternal and child-health services to which this discussion is especially directed. The Children's Bureau, under the Secretary of Labor, will administer these child-welfare provisions, except the grants for aid to dependent children, in their own homes.

Financial Allocations. — The annual amount made available for maternal and child-health services is $3,800,000 for the fiscal year of 1936 and for each fiscal year thereafter, and this amount is divided as follows:

1. Available for payment of half the total expenditures under approved plans are $2,820,000, of which $1,020,000 is for uniform apportionment to the states of $20,000 to each state, and $1,800,000 for apportionment on the basis of the proportion of live births in a state to all live births in the United States. This sum is known as Fund A.

2. Available for allotment according to the financial need of each state for assistance in carrying out the state plan, $980,000. This Fund B takes into consideration economic needs within the state or special race or group problems.

Approval of Plans.—The state plans are to be approved by the Chief of the Children's Bureau if they conform with the following conditions:

First, financial participation by the state.

Second, administration of the plan or supervision of administration by the state health agency.

Third, such methods of administration as are necessary for the efficient operation of the plan. The Children's Bureau expressly waives methods of selection, tenure of office, and compensation of personnel.

Fourth, provision for reports by the state health agency on forms, and containing such information as required by the Secretary of Labor, and compliance with such provisions as the Secretary of Labor may from time to time find necessary to assure the correctness and verification of the reports.

Additional Provisions. — The three additional provisions are those which most nearly interest us at this moment:

Provision for the extension and improvement of local maternal and child-health services;

Provision for coöperation with medical, nursing and welfare groups and organizations; and

Provision for the development of demonstration services in needy areas and among groups in special need.

The term "state" is defined to include Alaska, Hawaii, and the District of Columbia.

CALIFORNIA HEALTH CONDITIONS AND VITAL STATISTICS

II. In order to give a picture of the health conditions of mothers and babies in rural California, the accompanying maps are presented. These cover the average maternal and infant mortality for a period of five years, mortality rates being indicated by the key. By way of contrast, maps compiled by the Federal Children's Bureau from the statistics provided by the Bureau of the Census, showing California's status as compared with the other states are included. You will notice that, although California on the whole may be classified among those states with low maternal and infant mortality rates, there are counties in California which have much higher mortality rates than the State as a whole.

Infant Mortality Rate.—In regard to vital statistics in connection with maternal and child health, we may say that the infant mortality rate, said to be the most delicate index of health conditions, has gone down from 75 per thousand live births in 1920 to 49.5 in 1935, a reduction of 33⅓ per cent. When our state mortality rate is analyzed, it shows that early infant mortality—neonatal infant deaths—continues, without material reduction, year after year. Neonatal deaths are so closely bound to prenatal conditions that they can only be reduced by prevention exerted through the mother and by many of the same procedures and precautions that prevent maternal deaths.

Maternal Mortality Rate.—Our material mortality rate has declined from 5.7 per thousand live births in 1925 to 4.7 in 1935, a reduction of 16 plus per cent. Death rates from sepsis remain constant,

* From the Bureau of Child Hygiene, California Department of Public Health, San Francisco.
Read before the Pediatric Section of the California Medical Association at the sixty-sixth annual session, Del Monte, May 2-6, 1937.
See also page 356, in this issue.

TABLE 1.—*Maternity Home and Hospital Reports—Summary 1930-1935*

	Number of Live Births			Number of Maternal Deaths			Number of Infant Deaths			Number of Stillbirths		
	County Hospitals	Licensed Hospitals	Total in State	County Hospitals	Licensed Hospitals	Total in State	County Hospitals	Licensed Hospitals	Total in State	County Hospitals	Licensed Hospitals	Total in State
1930	6,002	42,387	84,382	50	145	443	205	844	4,945	277	1,132	2,427
1931	8,585	42,163	81,553	67	166	510	325	845	4,609	394	1,065	2,332
1932	11,322	38,958	78,108	79	99	448	542	796	4,125	454	887	2,153
1933	12,767	37,050	75,229	59	87	364	510	758	4,022	478	846	2,032
1934	12,781	39,391	78,442	59	108	346	648	800	4,047	440	809	1,874
1935	13,559	41,986	80,222	69	142	375	690	904	3,973	481	906	1,966

the decline having occurred in the group "puerperal causes other than sepsis."

In segregating these deaths into two groups—those delivered at home and those delivered in institutions—we have been aided by the fact that for many years the Bureau of Child Hygiene has had the responsibility of inspecting maternity homes and hospitals. As part of this inspection service we have received an annual report concerning the number of births occurring in these institutions; the deaths of mothers and of infants, with their causes, and the number of stillbirths; in addition, we have requested information upon the operative deliveries taking place within the institutions. In Table 1 you will see the figures which cover the licensed institutions in the State. They show that more than 65 per cent of the mothers in California are confined in institutions and away from their own homes. They show a gradually mounting number of deliveries in county hospitals. Within the period 1930 to 1935 county hospital deliveries have increased more than 100 per cent.

Over 16 per cent of the births in 1935 occurred in county hospitals; over 17.4 per cent of the infant deaths and 24 per cent of the stillbirths occurred in this group. The maternal mortality rate in county hospitals was 5 plus; the infant mortality rate was 50.9, contrasted with the figures 4.7 for maternal mortality for the State as a whole, and 49.5 for infant mortality.

FUNDAMENTAL ACTIVITIES IN A WORK PROGRAM

III. In discussing the fundamental activities of a maternal and child hygiene program, one necessarily emphasizes, first, the prenatal care of the expectant mother. In all the activities connected with the care of the mother, medical supervision is the great outstanding need with nurse instruction serving as a corollary to the physician in carrying out his plans for the mother. This is true not only in the prenatal period, but is essential in the whole plan of confinement care and postpartum service. The objective of this care is the prevention of complications and foreseeing of emergencies during pregnancy and confinement with the object of preventing maternal mortality, premature births, and stillbirths, so that the mother may survive her pregnancy in a sound condition, with the reward of a healthy child.

Aim of the State Board of Health.—The State Board of Public Health believes that the activities of the Bureau of Child Hygiene should be specially directed toward educating mothers to appreciate the services which the medical profession can render, and in advising, encouraging and urging mothers to seek this medical protection.

For the pediatrician, the program starts with the delivery of the mother, with the prevention of prematurity, the establishment of breast feeding, and the immediate care of the new-born. By Figure 4, you will see that at least 50 per cent of our infant mortality occurs within the first month of life, and again 50 per cent of this mortality occurs within the first ten days. The later benefits of pediatric care cannot affect this mortality to any considerable extent, since it depends largely upon premature birth, toxic conditions in the mother, inanition of the new-born, a very small portion being contributed by birth injuries and congenital abnormalities. Later mortality is dependent on communicable diseases, including respiratory and gastro-intestinal disease.

For the later care of infants, the establishment of regular habits of feeding, elimination, sleep and similar routine habits, with the supervision of growth, the prevention of communicable disease, and the gradual transfer from breast feeding to solid foods make up a large part of the care of the well child. These essentials have in them the elements of mental hygiene and, if properly conducted, meet many of the later problems of childhood which occur before the age of six years.

Aid in the Rural Areas.—How, then, can this program of fundamental activities be put to work in rural California to meet the needs of the State under the provisions of the Act?

Believing that the best means of educating a mother as to the needs of her child is the individual contact with the doctor, the program of prevention has centered itself in well-baby conferences conducted throughout the rural areas of the State, where no such facilities exist under public health auspices. The State has been districted into eight areas, to which a trained pediatric staff is assigned for conducting these conferences on a regularly worked-out schedule. As a necessary preliminary to this type of education, public health nursing activity prepares the ground and provides follow-up work. For those counties in the State that were without public health nursing service, personnel

TABLE 2.—*California—Total Births, Maternal Mortality, Infant Mortality, Stillbirths, Segregated by Place of Birth, County Hospital, Maternity Institution, Private Home*

	Number Live Births			Number Maternal Deaths			Number Infant Deaths			Number Stillbirths		
	County Hospital	Licensed Hospital	Total in State	County Hospital	Licensed Hospital	Total in State	County Hospital	Licensed Hospital	Total in State	County Hospital	Licensed Hospital	Total in State
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has been provided. Wherever possible a joint budget has been arranged, so that the local community feels itself as having a vital interest in the health program. In addition to organizing and assisting at the conferences, the nurses are instructed by the visiting pediatrician as to the type of home visit needed, in this way carrying to the home the guiding influence of the medical work.

Since the infant death rate in California rides upon the Mexican mortality rate, we have assigned a special demonstration, with one of our physicians in charge, to the Southern California area serving this group of mothers exclusively; nursing service is also included. We feel entitled to make this special assignment in this area since the resident white population is under the supervision of full-time county health units, through whom they can derive the same service.

Another of these physicians is assigned to a special demonstration among the children of the migratory workers. California's agricultural situation is such that many people have resided in the State for years, and yet have no legal residence since they move so frequently, following the crops. The Fund B, which was mentioned in speaking of the Social Security Act, is being spent in California for a demonstration among this group of children, in the effort to give them prenatal and infant supervision. The physician in this area has the assistance of two nurses in this demonstration.

In addition to this type of education every opportunity for group education is taken advantage of, both by the nurse and by the visiting physician, in addresses to women's groups and in the distribution of literature.

County Hospital Patients.—The first point of attack in the protection of maternal health is an attempt to lower the mortality among mothers delivered in county hospitals by providing adequate prenatal care, and education of mothers to reduce the infant mortality which occurs through prematurity, toxemia, etc. Thirty-three of our fifty-eight counties provide no protection for the mothers delivered under county auspices, often the first contact with the case being the arrival of the mother in labor at the county hospital. Since the physician who actually does the confinement, as well as the agent responsible for admissions to the county hospital, must be consulted before plans of this type are put into effect, prenatal clinics are arranged county by county. Up to the present, five such new clinics have been established. Again, the physician assigned to the district is responsible for conducting these clinics, reports being made to the physician who will do the confinement. The nursing service is provided either by our own staff nurses or by the local public health nurses in the employ of the county.

In all of these conferences advice on the value of immunizations is given to the mother. The actual work of immunization is undertaken only at the request of the local health authorities. It should be especially stressed that in no instance do our physicians give treatments. All cases of this kind are referred to their own physician for care, our object being to aid the mother to carry out the procedures for which she is responsible and which contribute to the health of her child.

Dental Defects.—When any group of children is examined, dental defects contribute over 50 per cent to the list of handicaps. Carrying with them, as they do, a constant infection, they contribute largely to the lowered vitality and incidence of disease in the groups afflicted, especially in relation to infected tonsils and adenoids. With the idea of stressing the need for better diet in the prevention of dental defects, and of the part played by early care of small fissures in the enamel, a dental program is being undertaken which provides for complete surveys of the teeth of children in rural counties. Accompanying the survey will be as much educational work as possible on the proper diet, the need of care, and the benefit of early dental service. From the children surveyed those from three to ten years, inclusive, will be selected and their financial status checked under local guidance. The children whose

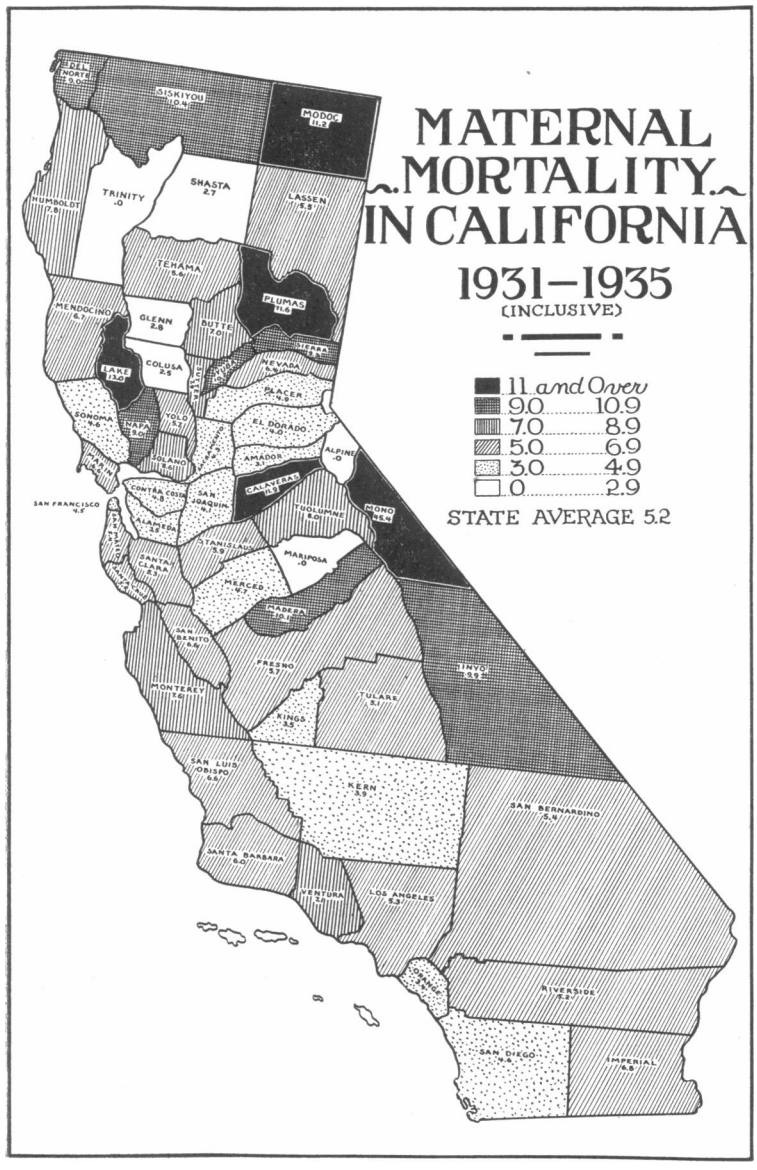

Fig. 1.—Maternal mortality rates 1931-1935 (inclusive). Average rate for five-year period for each county.

parents are unable to pay for dental service will be given cleanings, extractions, and amalgam or cement fillings, as a demonstration of the possibility of good mouth hygiene. This age group was selected because it still retained its deciduous teeth and yet, among the older children, would be those with several permanent teeth. If this program can be followed year by year, there will gradually grow up through the schools a generation with improved dentition and knowledge of dental hygiene.

At present this program, approved by the State Dental Society, is being carried out by members of the dental profession; dental hygienists may be added to the staff at a later date to relieve the dentists from the preliminary survey and reserve their time for the part of the program needing more technical skill.

Postgraduate Courses.—It was planned that, in addition to this service and educational program for the lay population, postgraduate education, both for the medical and nursing profession, would be undertaken. This has been a recommendation of all those investigating maternal and child-health conditions; it found greatest voice in the sections of the White House Conference having to do with maternal and child-health protection. Plans along this line have not yet been brought to final shape, but no program of maternal and child health can be complete without a double-headed educational program, educating the population of our smaller communities to appreciate modern maternal and child hygiene, and refreshing the physician, dentist and nurse in the same communities by postgraduate work so that they can provide the medical service which will be requested by the community.

CRIPPLED CHILDREN'S PROGRAM

To complete the picture of medical service available under the Social Security Act, a few words are appended concerning the Crippled Children's program, which is also being administered under the State Department of Public Health.

The Social Security Act provides for grants in aid, available "for locating crippled children and providing medical, surgical, corrective, and other services and care, and facilities for diagnosis, hospitalization, and after-care, for children who are crippled or who are suffering from conditions which lead to crippling . . ."

The plan submitted to the Federal Children's Bureau must comply in

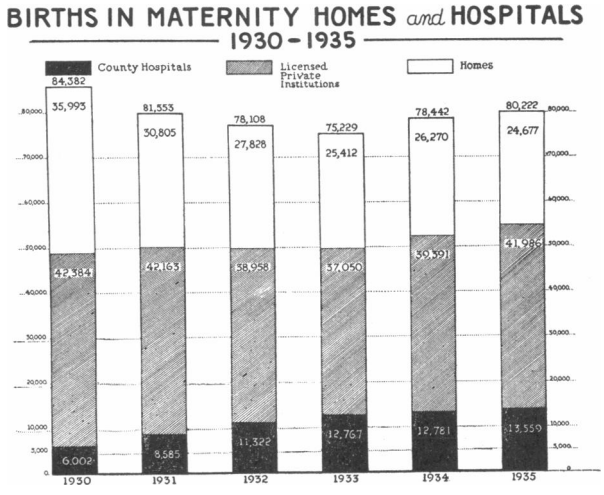

Fig. 3.—Births in California 1930-1935 (inclusive). Segregated by place of birth—county hospital, other maternity institutions, or private home.

general with the same provisions which apply to the maternal and child-health funds. In addition, a Professional Advisory Committee and a Lay Advisory Committee are set up under the provision which calls for coöperation of medical, health, nursing, welfare, and educational groups and agencies. According to the present plan, the same committees serve for both types, with the addition of the necessary orthopedic members to the Professional Advisory Committee when it has to do with Crippled Children's activities.

A survey has been made throughout the State in coöperation with nurses, Bureau of Vital Statistics, Bureau of Epidemiology, Bureau of Child Hygiene, and Bureau of Tuberculosis. Other public officials having to do with children are requested to report all known cases. In addition, private agencies and organizations are likewise asked to cooperate in the survey.

Diagnostic clinics for the purpose of locating and giving treatment to crippled children have been held in eight counties. An orthopedic surgeon, a field nurse, and a medical social worker are attached to these clinics, at which physical examinations, with recommendations for treatment, are made by qualified orthopedic surgeons for all children brought to the clinic, regardless of financial condition. Children are segregated according to the ability of their parents and guardians to furnish proper care, and the medical histories of children requiring corrective measures are reviewed so that the length and time of hospitalization can be determined. Medical and social after-care and supervision will be given all cases requiring corrective measures. In addition, an educational program for the prevention of deformities and for the early treatment of crippled children will be undertaken.

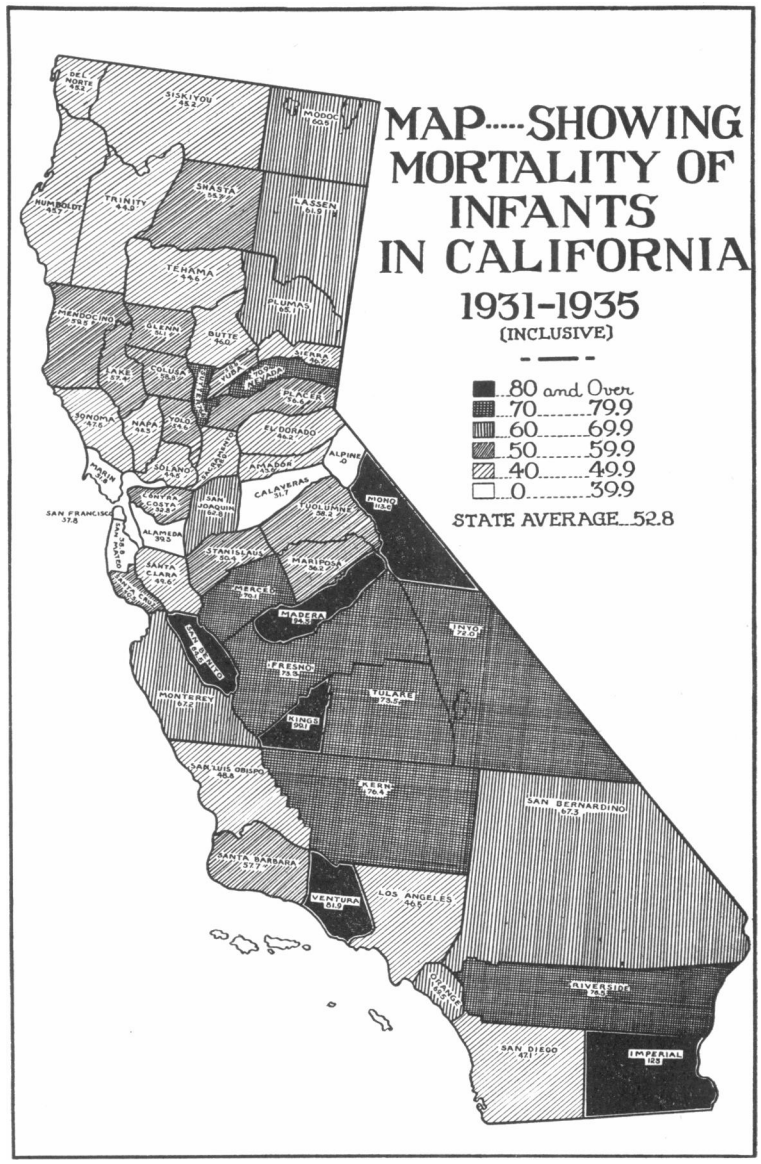

Fig. 2.—Infant mortality rates 1931-1935 (inclusive). Average rate for five-year period for each county.

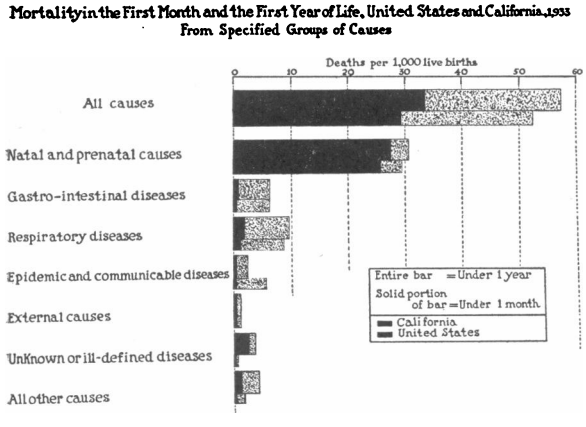

Fig. 4.—Infant mortality, 1933, in the first month and first year of life, from specified group of causes. Upper bar, United States registration area; lower bar, California.

To date, eight diagnostic clinics have been held under this plan, at which 502 children were examined. One-fifth of these were found to have orthopedic defects needing immediate correction, and one-tenth were advised to remain under orthopedic supervision.

This is an ambitious program, and its success will depend on the coöperation which is received from the local communities. To them and their interest this program will owe a great measure of its success.

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DISCUSSION

OSCAR REISS, M.D. (1930 Wilshire Boulevard, Los Angeles).—The purpose of the Social Security Act, adopted by Congress and approved by the President,

August 14, 1935, is stated in the general title of the Act to be the following:

"To provide for the general welfare by establishing a system of federal old-age benefits, and by enabling the several states to make more adequate provision for aged persons, blind persons, dependent and crippled children, maternal and child welfare, public health, and the administration of their unemployment-compensation laws; to establish a Social Security Board; to raise revenue; and for other purposes."

Security for the American home and protection of the family life of the wage-earners is the broad foundation upon which the welfare of American children must rest. All of the social security measures may truthfully be described as child-welfare measures. There is an obvious relation between adequate wage levels and full regular employment sufficient to yield a stable and adequate family income, unemployment insurance (when full employment fails), provision for preventive health services, accident prevention, and similar social measures, and the welfare of the children. Even old-age security measures promote the welfare of children by lifting the burden of support of the aged from families whose resources are needed to care for growing boys and girls.

In addition to general measures for social security, certain special measures designed to promote the normal growth, development, and welfare of children are provided. The health and welfare of children have been adversely affected in many ways by the depression, not only through family distress resulting from unemployment and poverty, but also through curtailment of resources of agencies created to serve their needs.

The special measures designed to promote the security of children come under three headings, closely related to one another, namely, (1) measures for the care of the dependent, neglected, fatherless and homeless children, and children whose surroundings are such as gravely to impair their physical and social development; (2) crippled children; (3) measures for the protection of child and maternal health.

For the purpose of carrying out these special measures, the act provides for subsidies to the states, consisting of a uniform apportionment to each state plus an additional apportionment on the basis of the number of live births, etc. These funds must be matched by the states. There is also available for allotment, according to financial need for assistance in carrying out state plans, a special fund that does not have to be matched by the states.

Examination of the provisions of the Act which are concerned with maternal and child health, crippled children, and child welfare, reveals that their primary purpose is to extend and strengthen services for mothers and children in rural areas suffering from economic distress, and among groups in special need. These are the people who have been hitherto, for the most part, outside the reach of those health and welfare services that have been more generally available in the larger cities. In this connection it is significant to note that, since 1929, rural infant mortality rates have been higher than urban rates, a reversal of the condition existing in prior years.

Concretely, this philosophy is expressed as a coöperative relation to be developed between the Federal Government and the states; the states and the local government units; the official agencies within these areas of government concerned with health, education and public welfare; the official agencies and representatives of voluntary groups such as medical societies, public health nursing organizations, other health groups, and social welfare agencies.

This part of the program of the Social Security Act can be carried out only as it becomes, in each state, a state-wide program, clothed with specific provisions for making it effective in the lives of men, women, and children of the state, and supplemented by such other measures of social provisions for human needs as experience shows to be necessary and feasible. As a foundation for all these professional undertakings, the understanding and intelligent support of professional and lay groups are essential.

As a member of the Advisory Committee to the Children's Bureau on Maternal and Child Health, I am in a position to say most emphatically that the Bureau does not wish to dictate to any state what its particular program shall be, or to take a hand in the selection of the personnel needed to carry out its program. It does entertain hopes, however, that the personnel will be selected according to high standards of training and fitness for the job.

Particular stress is being laid upon the vital importance of education in this program; education of the physician as well as of the layman. Too few of our group are evidencing interest. The pediatrician, above all citizens by reason of his training and experience, with his knowledge of the deleterious effects of adverse heredity, unfavorable environment, and improper food upon the growth and development of the child, should feel it his urgent duty not only to participate, but to seek leadership in this constructive program.

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Clifford Sweet, M.D*. (2490 Summit Street, Oakland). Doctor Stadtmuller has given us a comprehensive statement of the present and proposed program of the State Board of Health, concerning maternal and child health, to be carried out in rural districts with the assistance of the federal funds made available under the conditions of the Social Security Act.

I am certain that the mothers and children of rural California can be greatly benefited through the wise carrying out of this program. The medical profession can best serve not only the cause of public health, but its own interests, by whole-hearted coöperation in planning and carrying out this program. Doctor Stadtmuller spoke of winning the support of local communities as a necessary part of the program. I know, from many conversations with her, that she realizes that the most important group to be won are the local medical men. When I advise the fullest coöperation of medical men in carrying out this work, I am in no way an advocate of any form of state-controlled, socialized, or otherwise regimented medical profession. On the contrary, I am one who would cling to and fight for individual freedom and initiative, carried as far as may be, while having clearly in mind the rights, freedom, and best interests of other citizens.

I know there is no more generous body of men anywhere than the medical profession. However, we are human, and in our resentment against anything which gives even remote promise of curtailing our individual freedom we are apt to display an emotional attitude of anger and distrust rather than the more permanent and generous one to which the calmer, slower process of reason surely leads us.

Not only will the program of the California State Board of Public Health, as outlined by Doctor Stadtmuller, best serve the mothers and children of California, through and with the whole-hearted coöperation of the medical profession, but by this very coöperation, both in planning and carrying it out, we can most strongly exert influence; aye, even define and limit its entire public relationship as well as its effects upon the practice of medicine. On the other hand, our hostility can only make the program less effective in its most desirable objective, namely, improvement in maternal and child health, while at the same time it will, in several and devious ways, increase the speed with which bureaucratic medicine will compete with or dominate us.

We cannot defeat or halt such measures as this, because public opinion is strongly for them and we are a very small minority, not especially astute in the field of practical politics. Public opinion generally remains entrenched behind measures that are fortified with available funds for the payment of salaries. There is no marked human tend-

* Note.—Doctor Sweet is a member of the Professional Advisory Committee provided to coöperate with the State Board of Health in carrying out the provisions of the Social Security Act, and is state chairman for northern California of the American Academy of Pediatrics.

ency to murder or otherwise injure "Santa Claus." Those of us who teach pediatrics, either in organized teaching centers or through professional journals and meetings, must and will continue our best efforts to give freely all the knowledge and skill we possess. Young physicians not yet established in private practice may well find positions offered by the Government so attractive that, gradually, enough will remain in the service to make it a permanent part of American life. Once established, popular demand will clamor for an ever-increasing reliance upon it for full medical care.

The Social Security Act proposes at the present time to make the greatest possible use of the private practitioners already established in their respective communities, and is offering postgraduate instruction in maternal and child welfare in order to raise the grade of care available within the private practice of medicine. There can be no more certain guarantee that any service will remain free from outside influence than a satisfactory and increasing degree of excellence within itself. It would seem that members of the medical profession should welcome this opportunity to improve their training, especially since it can be had without cost or great loss of time. Prenatal and child-health conferences should stimulate the desire for this type of service in the community, with a consequent increase in the practice of those physicians who are trained to offer the best service in these fields.

A certain number of full-time physicians are necessary to carry out this work; but I think the introductory stage of the work and the postgraduate teaching can best be done by well-known, experienced practitioners. These older, better known physicians will, through experience, know how to manage people better than recent graduates and, being themselves private practitioners of medicine, will have an entrée into the councils of local medical societies.

Certain strategic points should be chosen at which an Institute on Child and Maternal Welfare should be held, lasting perhaps the greater part of the week. During this time one or several of the experienced men of whom I have spoken should live in the community, giving clinics open to all members of the local profession, appearing before the local medical society and talking to lay groups, such as Parent-Teacher meetings and service clubs, and being available for consultation, without cost to the patient, upon call by any physician in the community.

For service such as this by physicians from the larger centers the Government is offering a compensation of $25 per day and expenses. While this amount of compensation will bring a considerable measure of relief to those of the profession who have formerly done a great deal of this kind of work at their own expense, it is, I think, insufficient. I have talked with many of the best-established pediatricians in California, and all have freely expressed their willingness to make certain sacrifices in order to carry this work out. The compensation should, I think, be made $50 per day and expenses. If this were done, men of experience and ability could afford to spend much more time in the work. The extra money spent for services such as this would be spent much more profitably than in securing a longer term of service from less experienced physicians. I am certain that the net results of a few days in a community by an experienced, astute teacher of pediatrics might well be greater and more lasting than a month's effort on the part of a young, inexperienced, full-time Government employee, with less, or at least no greater, expense to the Government. So while physicians will go out from the medical centers, even at a sacrifice, to carry on this work, I want to go on record in favor of more adequate compensation in order that the teaching and leadership may be the best obtainable.

Incidentally, I should like to call Doctor Stadtmuller's attention to the fact that temporary (cement) fillings have no place in children's dentistry except that they indeed be for temporary use only.

PLASTIC OPERATION ON THE PELVIS OF A SOLITARY KIDNEY*

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DISCUSSION *by Lionel P. Player, M. D., San Francisco; Albert M. Meads, M. D., Oakland; George W. Hartman, M. D., San Francisco.*

IN 1891, Kuster[1] recorded the first successful plastic surgical operation on the renal pelvis. The term "successful" is used with reservation, since before the days of pyelography the measure of surgical result lacked the present-day precision. One year later, Christian Fenger[2] published an account of a plastic operative procedure for the relief of hydronephrosis due to valve formation and stricture of the ureter. Following Fenger's article in the *Journal of the American Medical Association,* the renal pelvis became the recipient of a surgical attention more enthusiastic than discriminating. As an inevitable result, the procedure fell into disfavor. In 1927, Quinby[3] reported thirteen cases of this type, and two years later, in a symposium at the annual meeting of the American Medical Association in which von Lichtenberg,[4] Walters,[5] and Quinby[6] participated, fifty-seven cases were discussed. The influence of this meeting did much to put the operation on a respectable basis.

IS SURGICAL PROCEDURE INDICATED?

The idea of surgery of the renal pelvis has not met with unanimous acceptance. Some urologists feel, with Moore,[7] that, since this operation has been successful in so few cases, perhaps "conservatism would find a truer expression in that procedure which offers the best prospect of permanent relief." Keyes[8] states that in kidneys which are materially infected, plastic operations on the pelvis will break down and the resultant scar tissue will cause kinking and obstruction. The accuracy of Keyes' observation will probably hinge upon his interpretation of the phrase "materially infected," since both Quinby and Walters report successful results on infected cases, and in the case about to be reported the urine was purulent. Cabot[9] expresses an "abiding skepticism" in regard to ultimate results. He feels that these repairs break down later as the results of infection. Walters[10] believes that infection does not have much influence with the final result, and suggests that the chief factor is the complete removal of obstruction.

FOUR METHODS OF SURGICAL PROCEDURE

In the surgical attack on ureteropelvic obstructions four methods have been most often used:

1. Reimplantation of the excised ureter into the pelvis at its most dependent part.
2. Longitudinal incision with transverse closure.
3. The "Y" incision with the "V" closure.
4. Some type of lateral anastomosis, either with the pelvis or another portion of the ureter.

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